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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,883	03/08/2001	Gerbrand Deetman	12598.0131CNUS00	7184
27128	7590	06/05/2007	EXAMINER	
BLACKWELL SANDERS PEPER MARTIN LLP			OGDEN JR, NECHOLUS	
720 OLIVE STREET			ART UNIT	PAPER NUMBER
SUITE 2400			1751	
ST. LOUIS, MO 63101			MAIL DATE	DELIVERY MODE
			06/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/801,883	DEETMAN, GERBRAND
	Examiner	Art Unit
	Necholus Ogden	1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 November 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 107-130 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 107-130 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8-14-2006 has been entered.

Election/Restrictions

The restriction requirement with respect to the election of species, noted in paper mailed 11-03-2006 is withdrawn in view of applicant's arguments.

Reissue Applications

Claims 107-130 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue, which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claim subject matter that applicant previously surrendered during the prosecution of the application.

Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

1. Applicant argues and maintains that "claims 107-130 (the reissue claims) are not added in an attempt to recapture subject matter that was surrendered in the prosecution of the original application upon which the'551 Patent because the invention now claimed was never before claimed.

2. I. THREE STEP TEST FOR RECAPTURE:

In Clement, 131 F.3d at 1468-70, 45 USPQ2d at 1164-65, the Court of Appeals for the Federal Circuit set forth a three-step test for recapture analysis. In Pannu, 258 F.3d at 1371, 59 USPQ2d at 1600, the court restated this test as follows: Application of the recapture rule is a three-step process. The first step is to determine whether and in what aspect the reissue claims are broader than the patent claims.'.... The second step is to determine whether the broader aspects of the reissued claim related to surrendered subject matter'.... Finally, the court must determine whether the reissued claims were materially narrowed in other respects to avoid the recapture rule.

A. The First Step – Was There Broadening?

In every reissue application, the examiner must first review each claim for the presence of broadening, as compared with the scope of the claims of the patent to be reissued. A reissue claim is broadened where some limitation of the patent claims is no longer required in the reissue claim; see MPEP § 1412.03 for guidance as to the nature

of a "broadening claim." If the reissue claim is not broadened in any respect as compared to the patent claims, the analysis ends; there is no recapture.

Clearly, applicants' claims are directed to the additive package that is "suitable for use in any phosphate ester base stock fluid composition". The functional fluid of the amended reissue application does not require a specific phosphate ester based fluid, which is claimed more broadly, since it does not include the limitation to just the preferred phosphate esters "....in which the alkyl substituents are substantially isoalkyl C4 or C5". Any based fluid may be used according to the newly claimed reissue invention.

B. The Second Step - Does Any Broadening Aspect of the Reissued Claim Relate to Surrendered Subject Matter?

Where a claim in a reissue application is broadened in some respect as compared to the patent claims, the examiner must next determine whether the broadening aspect(s) of that reissue claim relate(s) to subject matter that applicant previously surrendered during the prosecution of the original application (which became the patent to be reissued). Each limitation of the patent claims, which is omitted or broadened in the reissue claim, must be reviewed for this determination. This involves two sub-steps:

1. The Two Sub-Steps:

(A) It must first be determined whether there was any surrender of subject matter made in the prosecution of the original application, which became the patent to be reissued. If an original patent claim limitation now being omitted or broadened in the

present reissue application was originally relied upon by applicant in the original application to make the claims allowable over the art, the omitted limitation relates to subject matter previously surrendered by applicant. The reliance by applicant to define the original patent claims over the art can be by way of presentation of new/amended claims to define over the art, or an argument/statement by applicant that a limitation of the claim(s) defines over the art. To determine whether such reliance occurred, the examiner must review the prosecution history of the original application file (of the patent to be reissued) for recapture. The prosecution history includes the rejections and applicant's arguments made therein. If there was no surrender of subject matter made in the prosecution of the original application, again the analysis ends and there is no recapture.

(B) If there was a surrender of subject matter in the original application prosecution, it must then be determined whether any of the broadening of the reissue claims is in the area of the surrendered subject matter. All of the broadening aspects of reissue claims must be analyzed to determine if any of the omitted/broadened limitation(s) are directed to limitations relied upon by applicant in the original application to make the claims allowable over the art.

Reviewing the prosecution history it can be clearly determined that applicant's broadened reissue claims relate to surrendered subject matter, according to the outlined test as stated above, that was amended to overcome the prior art to make the claims allowable. For example, applicant states, in his response filed June 28, 1994 in paper #6/C of application 08/099,267, "To similar effect is the express language of MacKinnon

'674... "The alkyl groups maybe straight or branched chain, with straight-chain, such as n-butyl, preferred." In accordance with the foregoing express language of both MacKinnon '067 and MacKinnon '674, the trialkyl phosphate of choice is tri (n-butyl) phosphate. **This teaching, of course, is contrary to the requirements of the instant invention that the alkyl substituents attached to the phosphate moiety of the phosphate ester based stock component are substantially isoalkyl C4 or C5."**

C. The Third Step - Were the reissued claims materially narrowed in other respects to compensate for the broadening in the area of surrender, and thus avoid the recapture rule?

Reissue Claims are Narrower in Scope Than Patent Claims, in Area Not Directed to Amendment/Argument Made to Overcome Art Rejection in Original Prosecution; are Broader in Scope by Omitting Limitation(s) Added/Argued To Overcome Art Rejection in the Original Prosecution: In this case, there is recapture.

The reissue claims are narrower in scope to the patent claims, in an area not directed to amendment(s) made to overcome the art rejection in original prosecution and broader in scope by omitting limitations added to overcome art rejection in the original prosecution. For example, applicant's have narrowed subject matter directed to the additive package (i.e., an expoxide compound; perfluoroalkyl sulfonic acid; methacrylate ester polymer; and a hindered phenol) and broadened the phosphate ester based stock component by omitting it entirely, which was added to overcome the art in the original patent. Therefore, as outlined in the Clement, 131 F.3d at 1470, 45

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USPQ2d at 1165 and explained in MPEP 1412.02 there is recapture that bars the reissue of claims 107-130.

Specification

3. Claim 130 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend for. See MPEP § 608.01(n). Accordingly, the claim should refer to other claims in the alternative only not been further treated on the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 107-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacKinnon et al (4,206,067) in view of Smith (3,679, 587).

MacKinnon discloses an anti-erosion functional fluid comprising phosphate esters as the base fluid (col. 2, line 48-col. 3, line 50); a perhalometalloidic salt (col. 3, line 52-col. 5, line 42) and an organic base (col. 5, line 45-col. 6, line 41). Furthermore, MacKinnon teaches that trialkyl phosphate esters are preferred esters for the base fluid (col. 2, line 64-67), MacKinnon teaches that dialkyl aryl phosphates, alkyl diaryl phosphates, etc. may also be employed as base fluid (col. 2, lines 48-63). Moreover, it is taught that the trialkyl phosphate esters that give optimum results are those having alkyl groups of 1 to 12 carbon atoms, preferably 4 to 9, and are either branched or straight chain configuration (col. 3, line 4-9). MacKinnon teaches the inclusion of epoxide hydrolysis inhibitors such as 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate (col. 7, lines 17-20) and a specific diepoxide (col. 7, line 24-44); a methacrylic acid ester viscosity index improving agent having a molecular weight of from about 5,000 to 300,000 (col. 7, lines 63-col. 8, line 3); an oxidation inhibitor such as a hindered phenol di-t-butylparacresol (col. 7, lines 1-2); di(octylphenyl) amine (col. 8, line 18); and a foam inhibitor (col. 8, line 19).

MacKinnon teaches the inclusion of a perhalometalloidic salt, MacKinnon does not teach the inclusion of the presently required perfluoroalkylsulfonic acid.

Smith discloses a phosphate ester based functional fluid containing 0.001 to 5.0 parts of a perfluoroalkylsulfonic acid anti-erosion additive per 100 parts of the phosphate ester (col. 3, lines 4-52 and col. 1, lines 12-17). The addition of an epoxide acid scavenger such as 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate is also taught (col. 8, lines 46-col. 9, line 8 and base fluid B, C, D and E).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, absent a showing to the contrary, to employ the perfluoroalkyl sulfonic acid as the perhalometalloidic acid which is an anti-erosion additive for phosphate ester based functional fluid and Smith teaches that the perfluoroalkyl sulfonic acid is an anti-erosion additive for a phosphate ester based functional fluid.

Claims 107-130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackinnon (4,206,067) in view of Smith (3,679,587) and further in view of Great Britain (1,370,728) and French (2,120,127).

MacKinnon and Smith are relied upon as set forth above.

MacKinnon teaches the inclusion of various hindered phenols as oxidation inhibitors, MacKinnon does not disclose the inclusion of the presently preferred hindered polyphenols.

Great Britain '728 and French '217 teach the use of 4,4-methylene bis(2,6 di-t-butyl phenol), also known as Ethanox 702 as an antioxidant in a phosphate ester based functional fluid (claim 1 of page 9; and page 7, lines 10-46) and (Abstract and page 3, line 9), respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, and absent a showing to the contrary, to employ the hindered polyphenol of either GB '728 or FR '127 as the hindered phenol oxidation inhibitor of MacKinnon because MacKinnon appears to invite the inclusion of any oxidation inhibitor which is preferably a hindered phenol (col. 6, line 66-col. 7, line 2) and the hindered

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phenols of both GB '728 and FR '127 are known to be employed as antioxidants in a phosphate ester based functional fluid.

1. Claims 107-130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skydrol ® LD-4, in view of MacKinnon (4,206,067) and further in view of Great Britain (1,370,728) and French (2,120,127).

Skydrol ® LD-4, as admitted by patentee in U.S. 5,464,551 (Table 11, columns 35-36), contains 50-60% tributyl phosphate (TBP); 30-35% dibutyl phosphate (DBPP); 5-10% of poly(butyl/hexyl methacrylate) viscosity index improver HF411; 0.005-1.00% of an anti-erosion agent FC-98, a potassium salt of perfluoroctylsulfonic acid; 4-8% of the epoxide scavenger MCS 1562, 2-ethylhexyl 3,4-epoxycyclohexanecarboxylate; 1.00% of the antioxidant Ionol, 2,6-di-tert-butyl-p-cresol; and 0.13-1.00% of the copper corrosion inhibitor FH-132, 1,2-(diphenylthio)ethane. Skydrol ® LD-4, however, does not contain an amine antioxidant.

MacKinnon is relied upon a set forth above.

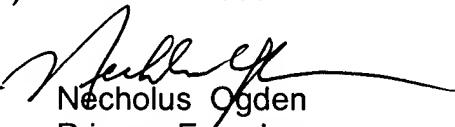
It would have been obvious to one of ordinary skill in the art at the time the invention was made, absent a showing to the contrary, to include the di(octylphenol) amine of MacKinnon which is a known antioxidant for phosphate ester based functional fluids and, would appear to benefit the functional fluid of Skydrol ® LD-4 in a synergistic or beneficial manner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholes Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-T, Th-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Necholes Ogden
Primary Examiner
Art Unit 1751

No
2-19-2007